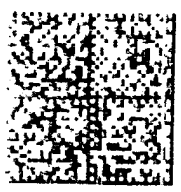
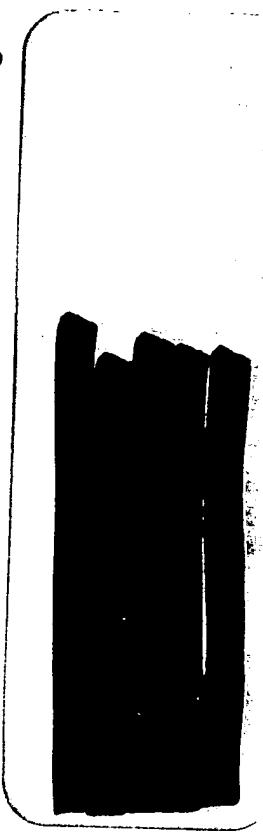


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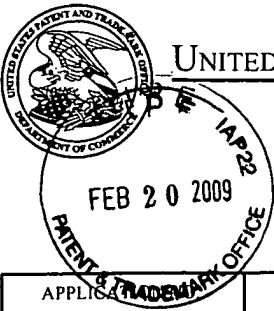
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/832,812

04/12/2001

Andras Sarkozy

STOCCOM-P5AUSR1

2745

7590 02/06/2009  
STORAGECOMPUTER CORPORATION  
11 RIVERSIDE DRIVE  
NASHUA, NH 03062.

EXAMINER

KIM, HONG CHONG

ART UNIT

PAPER NUMBER

2185

MAIL DATE

DELIVERY MODE

02/06/2009

PAPER

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The time period for reply, if any, is set in the attached communication.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
09832812	4/12/2001	SARKOZY ET AL.	STOCCOM-P5AUSRI

STORAGECOMPUTER CORPORATION  
11 RIVERSIDE DRIVE  
NASHUA, NH 03062

EXAMINER

Hong . Kim

ART UNIT	PAPER
2185	20090113

DATE MAILED:

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**Commissioner for Patents**

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**Attachments:**

IDS Mail Date: 8/2/01, 2/7/02, 4/8/02, 5/17/02, 8/8/02, 8/19/02, 5/20/03, and 8/25/04.

/Hong Kim/  
Primary Examiner, Art Unit 2185

### **DETAILED ACTION**

1. Claims 1-165 are presented for examination.
2. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 5,93,919 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely appraise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

### ***Amendment to Reissue application***

3. The amendment filed 4/12/01 proposes amendments to the claims and the amendment filed 2/19/02 proposes amendments to the drawings that do not comply with 37 CFR 1.173(b), which sets forth the manner of making amendments in reissue applications. A supplemental paper correctly amending the reissue application is required. Because underline marking is missing on newly added claim 14 (see amendment filed on 4/12/01). Also changes to the drawings filed on 2/19/02 must be included a replacement sheet of drawings which shall be an attachment to the

Art Unit: 2185

amendment document. Any replacement sheet of drawings must be in compliance with § 1.84 and shall include all of the figures appearing on the original version of the sheet, even if only one figure is amended. Amended figures must be identified as "Amended," and any added figure must be identified as "New." In the event that a figure is canceled, the figure must be surrounded by brackets and identified as "Canceled." All changes to the drawing(s) shall be explained, in detail, beginning on a separate sheet accompanying the papers including the amendment to the drawings. See 37 CFR 1.173(b)(3) and MPEP § 1414 and 1453.

The amendments to the claims filed on 4/12/01 and 2/19/02 are defective for failure to comply with provisions of 37 CFR 1.173.

Although applicant include a very general statement for support for claim changes (applicant "Remark" filed on 2/19/02), however, each change made in the claim is not being accompanied by a concise explanation of the support in the disclosure of the patent for the change made to the claim (i.e., support for all changes made in the claims, whether insertions or deletions) (37CFR 1.173 C and MPEP 1453). In other words, the claimed subject matter for each of the claims is not clearly mapped to the specification by page and line number, and to the drawing, if any, by reference characters. A concise explanation of the subject matter defined in each of the claims involved in the reissue amendment, which must refer to the specification by page and line number, and to the drawing, if any, by reference characters. While reference to page and line number of the specification requires somewhat more detail than simply

summarizing the invention, it is considered important to enable the Examiner to more quickly determine where the claimed subject matter is described in the application. Also every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. Also support for a program storage medium and a computer readable medium should be provided to prevent possible 112 1<sup>st</sup> paragraph and 101 rejections. Applicant did not clearly point out what is changed in the "Remarks" portion of the amendment. A clear explanation on each of the newly added claims 11-165 filed on 4/12/01 and 2/19/02 should appear in the remarks (see MPEP 1453).

**A shortened statutory period for reply to this letter is set to expire ONE (1) MONTH or THIRTY (30) DAYS, whichever is longer, from the mailing date of this letter.**

4. Applicant is notified that any subsequent amendment to the specification and/or claims must comply with 37 CFR 1.173(b). In addition, when any substantive amendment is filed in the reissue application, which amendment otherwise places the reissue application in condition for allowance, a supplemental oath/declaration will be required. See MPEP § 1414.01. Applicant is notified that any subsequent amendment to the specification and/or claims must comply with 37 CFR 1.173(b). In addition, when

Art Unit: 2185

any substantive amendment is filed in the reissue application, which amendment otherwise places the reissue application in condition for allowance, a supplemental oath/declaration will be required. See MPEP § 1414.01.

***Oath/Declaration***

5. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because the declaration does not specifically identifying the error. Any error in the claims must be identified by reference to the specific claim(s) and the specific claim language wherein lies in error. It appears as though applicant is saying that the not requirement of the “parity information” limitation from the claims is the error, however, the new issue claims also contain “parity” (i.e. claim 35, “at least one parity block”). There should be more specificity including an indication of where in the specification the embodiment now being claimed can be found.

A new reissue oath or declaration in compliance with 37 CFR 1.175 is required. See MPEP § 1414.

6. Claims 11-165 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

***Information Disclosure Statement***

7. Acknowledgment is made of applicant's Information Disclosure Statement (IDS) Form PTO-1449, filed on 8/2/01, 2/7/02, 4/8/02, 5/17/02, 8/8/02, 8/19/02, 5/20/03, and 8/25/04. In an attempt to fulfill Applicant's duty to disclose information which is material to patentability according to 37 CFR 1.56, Applicants have submitted a large number of documents for the Examiner to consider. Documents filed on 8/25/04, cited numbers 6 thru 11, and the documents filed on 5/20/03 sheets 15-16 were considered, however, it appears that those are not material to patentability and should not have been submitted. Also it appears from a cursory review of the rest of documents that the vast majority of them are not material to patentability and should not have been submitted. In fact, the sheer number of documents creates an undue burden on the Examiner since if each document is material to patentability, each document must be carefully considered.

According to MPEP 609 (emphasis added): Although a concise explanation of the relevance of the information is not required for English language information, applicants are encouraged to provide a concise explanation of why the English-language information is being submitted and how it is understood to be relevant. Concise explanations (especially those which point out the relevant pages and lines) are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability.



Art Unit: 2185

Additionally, Applicant is made aware of the court decision in *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc., et al.*, 175 USPQ 260 (DC SFla, 1972) which stated that "Applicant has obligation to call most pertinent prior patent to attention of Patent Office in a proper fashion and to attempt to patentably distinguish his claimed invention from disclosure of patent; failure to take these affirmative steps, particularly when coupled with misrepresentations made to the Patent Office, renders unenforceable the patent issued on his application." Apparently a good reference was buried in the mountain of prior art in the case and never pointed out by the Applicant.

Applicant is requested/reminded that only documents which are "material to patentability" should be submitted. See 37 CFR 1.56 for definition of materiality.

Accordingly, the documents filed on 8/25/04, cited numbers 6 thru 11, and the documents filed on 5/20/03, sheets 15-16 were considered, however, the rest of documents on the information disclosure statements have not been considered. Applicant should submit a new IDS containing only those documents which are material to patentability, and Applicant should call Examiner's attention to particular passages and/or figures of particular documents. Resubmission of the previously submitted documents is not necessary.

### ***Conclusion***

1. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show

Art Unit: 2185

how the amendments avoid such references or objections. See 37 CFR 1.111(c).

2. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

3. A shortened statutory period for reply to this letter is set to expire ONE (1) MONTH or THIRTY (30) DAYS, whichever is longer, from the mailing date of this letter.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong C Kim whose telephone number is (571) 272-4181. The examiner can normally be reached on M-F 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on (571) 272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 whose telephone number is (571) 272-2100.

Art Unit: 2185

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6. **Any response to this action should be mailed to:**

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**or faxed to TC-2100:**  
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/Hong Kim/  
Primary Examiner, Art Unit 2185  
January 12, 2008

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<b>Application Number</b>	09/832,812
<b>Filing Date</b>	04/12/2001
<b>First Named Inventor</b>	SARKOZY, et al
<b>Group Art Unit</b>	2185
<b>Examiner Name</b>	Kim
<b>Attorney Docket Number</b>	STO-05RI

(use as many sheets as necessary)

Sheet

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Signature**

/Hong Kim/

Date  
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Sheet 1 of 22

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Application Number	09/832,812
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<b>Filing Date</b>	4/12/2001
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<b>First Named Inventor</b>	Sarkozy, et al.
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Art Unit	2185
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<b>Examiner Name</b>	Kim
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**Attorney Docket Number** | ~~STO-06RI~~

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number - Kind Code <sup>2</sup> (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 5,317,722	05-31-1994	Evans	
		US- 5,333,198	07-26-1994	Houlberg et al.	
		US- 5,657,468	08-12-1997	Stallmo et al.	
		US- 5,708,828	01-13-1998	Coleman	
		US- 5,720,025	02-17-1998	Wilkes et al.	
		US- 5,790,773	08-04-1998	DeKoning et al.	
		US- 5,983,283	11-09-1999	Senator, et al.	
		US- 6,115,797	09-05-2000	Kanda, et al.	
		US- 6,148,142	11-14-2000	Anderson	
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		Filing Date	4/12/2001
		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
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		GIBSON, G.A., "Redundant Disk Arrays: Reliable, Parallel Secondary Storage," The MIT Press, Cambridge, Massachusetts (1992), pp. xvii-xi and 1-288.	
		MATTHEWS, K.C., "Implementing a Shared File System on a HIPPI Disk Array," Fourteenth IEEE Symposium on Mass Storage Systems (1995), pp. 77-88.	
		Katz, R. H., "High-Performance Network and Channel Based Storage," Proceedings of the IEEE, Vol. 80, No. 8 (August 1992), pp. 1237-1261.	
		"Protocols for X/Open PC Interworking: SMB, Version 2," X/Open CAE Specification (1992) pp. 121-133, 135-149 and 151-177.	
		GIBSON, G.A., et al., "A Case for Network-Attached Secure Disks," School of Computer Science, Carnegie Mellon University (September 25, 1996) pp. 1-19.	
		"The RAIDBook: A Source Book for RAID Technology," Edition 1-1, The RAID Advisory Board, St. Peter, MN(November 18, 1993), pp. 1-110.	
		DRAPEAU, A.L., et al, "RAID-II: A High-Bandwidth Network File Server," IEEE (1994), pp. 234-244.	
		COPELAND, G., et al., "A Comparison Of High-Availability Media Recovery Techniques," Association for Computing Machinery (May 1989), pp. 98-109.	
		COYNE, R.A., et al., "The High Performance Storage System," Association for Computing Machinery (April 1993) pp. 83-92.	
		CROCKETT, T. W., "File Concepts For Parallel I/O," Association for Computing Machinery (August 1989), pp. 574-579.	
		DARLIN, M.D., et al., "A Quantitative Analysis of Cache Policies for Scalable Network File Systems," Association for Computing Machinery (May 1994), pp. 150-160.	

Examiner Signature	/Hong Kim/	Date Considered	01/12/2009
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Application Number	09/832,812
		Filing Date	4/12/2001
		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
		Attorney Docket Number	STO-05RI
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		COMER, D. E., et al., "Uniform Access to Internet Directory Services," Association for Computing Machinery (August 1990), pp. 50-59.	
		KRONENBERG, N.P., et al., "VAXclusters: A Closely-Coupled Distributed System," ACM Transactions on Computer Systems, Vol. 4, No. 2 (May 1986), pp. 130-146.	
		KIM, W., "Highly Available Systems for Database Applications," Computing Surveys, Vol. 16, No.1 (March 1984), pp.71-98.	
		JOSHI, S.P., "The Fiber Distributed Data Interface: A Bright Future Ahead," IEEE (1986), pp. 504-512.	
		HUBER, J.V. Jr., et al., "PPFS: A High Performance Portable Parallel File System," Association for Computing Machinery (June 1995), pp. 335-394.	
		KING, R.P., et al., "Management of a Remote Backup Copy for Disaster Recovery," ACM Transactions on Database Systems, Vol. 16, No. 2 (June 1991), pp. 338-368.	
		SVOBODOVA, L., "File Servers for Network-Based Distributed Systems," Computing Surveys, Vol. 16, No. 4 (December 1984), pp. 353-398.	
		LANTZ, K.A., et al., "Towards a Universal Directory Service," Association for Computing Machinery (September 1985), pp. 250-260.	
		HOWARD, J.H., et al., "Scale and Performance in a Distributed File System," ACM Transactions on Computer Systems, Vol. 6, No. 1 (February 1988), pp. 51-81.	
		DAVIDSON, S.B., et al., "Consistency In Partitioned Networks," Computing Surveys, Vol. 17, No. 3 (September 1985) pp. 341-370.	
		TANENBAUM, A.S., et al., "Distributed Operating Systems," Computing Surveys, Vol. 17, No. 4 (December 1985), pp. 419-470.	

Examiner Signature	/Hong Kim/	Date Considered	01/12/2009
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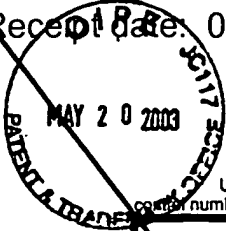
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Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Application Number	09/832,812
		Filing Date	4/12/2001
		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
		Attorney Docket Number	STO-05RI
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		LISKOV, B., et al., "Replication in the Harp File System," Association for Computing Machinery (1991), pp. 226-238.	
		NG, S., et al., "Trade-offs between Devices and Paths in Achieving Disk Interleaving," IEEE (February 1988), pp. 196-201.	
		MOHAN, C., "IBM's Relational DBMS Products: Features and Technologies," Association for Computing Machinery (May 1993), pp. 445-448.	
		MITCHELL, J.G., et al., "A Comparison of Two Network-Based File Servers," Communications of the ACM, Vol. 25, No. 4 (April 1982), pp. 233-245.	
		"NonStop Transaction Services/MP," Tandem Transaction Services Product Description (1994), pp. 1-6.	
		RAMAKRISHNAN, K.K., et al., "A Model of File Server Performance for a Heterogeneous Distributed System," Association of Computing Machinery (February 1986), pp. 338-347.	
		RICHARDS, J., et al., "A Mass Storage System for Supercomputers Based on Unix," IEEE (September 1988), pp. 279-286.	
		SANDHU, H.S., et al., "Cluster-Based File Replication in Large-Scale Distributed Systems," 1992 ACM Sigmetrics & Performance Evaluation Review, Vol. 20, No. 1 (June 1992), pp. 91-102.	
		POLYZOIS, C.A., et al., "Evaluation of Remote Backup Algorithms for Transaction-Processing Systems," ACM Transactions on Database Systems, Vol. 19, No. 3 (September 1994), pp. 423-449.	
		WEINSTEIN, M.J., et al., "Transactions and Synchronization in a Distributed Operating System," Association of Computing Machinery (December 1985), pp. 115-126.	

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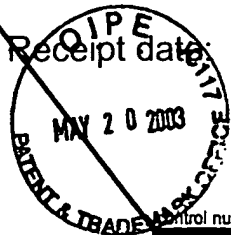
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		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
		Attorney Docket Number	STO-05RI
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		WALKER, B., et al., "The LOCUS Distributed Operating System," Association of Computing Machinery (June 1983), pp. 49-70.	
		HARTMAN, J.H., et al., "The Zebra Striped Network File System," ACM Transactions on Computer Systems, Vol. 13, No. 3 (August 1995), pp. 274-310.	
		LEVY, E., et al., "Distributed File Systems: Concepts and Examples," ACM Computing Surveys, Vol. 22, No. 4 (December 1990), pp. 321-374.	
		"NCSA's Upgrade Strategy," Access (Fall 1994), pp. 1-3.	
		CHANDRA, A., "Connection Machines," Thinking Machines Corporation (May 16, 1996).	
		CHEN, P.M., et al., "A New Approach to I/O Performance Evaluation - Self-Scaling I/O Benchmarks, Predicted I/O Performance," ACM Transactions on Computer Systems, Vol. 12, No. 4 (November 1994), pp. 308-339.	
		"Foreground/Background Checking of Parity in a Redundant Array of Independent Disks-5 Storage Subsystem," IBM Technical Disclosure Bulletin, Vol. 38, No. 7 (July 1995), pp. 455-458.	
		"Limited Distributed DASD Checksum, a RAID Hybrid," IBM Technical Disclosure Bulletin, No. 4a (September 1992), pp. 404-405.	
		"Direct Memory Access Controller for DASD Array Controller," IBM Technical Disclosure Bulletin, Vol. 37, No. 12 (December 1994), pp. 93-98.	
		"Parity Read-Ahead Buffer for Raid System," IBM Technical Disclosure Bulletin, Vol. 38, No. 9 (September 1995), pp. 497-500.	

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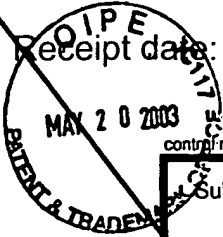
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		Filing Date	4/12/2001
		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
Attorney Docket Number	STO-05RI	Technology Center 2100	
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		"Continuous Data Stream Read Mode for DASD Arrays," IBM Technical Disclosure Bulletin, Vol. 38, No. 6 (June 1995), pp. 303-304.	
		"Multibus Synchronization for Raid-3 Data Distribution," IBM Technical Disclosure Bulletin, No. 5 (October 1992), pp. 21-24.	
		"Direct Data Coupling," IBM Technical Disclosure Bulletin (August 1976), pp. 873-874.	
		"Redundant Arrays of Independent Disks Implementation in Library within a Library to Enhance Performance," IBM Technical Disclosure Bulletin, Vol. 38, No. 10 (October 1995), pp. 351-354.	
		"Design for a Backing Storage for Storage Protection Data," IBM Technical Disclosure Bulletin, No. 1 (June 1991), pp. 34-36.	
		"Data Volatility Solution for Direct Access Storage Device Fast Write Commands," IBM Technical Disclosure Bulletin, No. 12 (May 1991), pp. 337-342.	
		"Efficient Storage Management for a Temporal Performance Database," IBM Technical Disclosure Bulletin, No. 2 (July 1992), pp. 357-367.	
		"On-Demand Code Replication in a Firmly Coupled Microprocessor Environment," IBM Technical Disclosure Bulletin, Vol. 38, No. 11 (November 1995), pp. 141-144.	
		"Bounding Journal Back-Out during Recovery of Data Base Replica in Fault-Tolerant Clusters," IBM Technical Disclosure Bulletin, Vol. 36, No. 11 (November 1993), pp. 675-678.	

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		Group Art Unit	2185
		Examiner Name	Kim
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		"High-Speed Track Format Switching for Zoned Bit Recording," IBM Technical Disclosure Bulletin, Vol. 36, No. 11 (November 1993), pp. 669-674.	
		"Technique for Replicating Distributed Directory Information," IBM Technical Disclosure Bulletin, No. 12 (May 1991), pp. 113-120.	
		"Fault Tolerance through Replication of Video Assets," IBM Technical Disclosure Bulletin, Vol. 39, No. 9 (September 1996), pp. 39-42.	
		"Dual Striping for Replicated Data Disk Array," IBM Technical Disclosure Bulletin, No. 345 (January 1993).	
		"Replication and Recovery of Database State Information in Fault Tolerant Clusters," IBM Technical Disclosure Bulletin, Vol. 36, No. 10 (October 1993), pp. 541-544.	
		"Threshold Scheduling Policy for Mirrored Disks," IBM Technical Disclosure Bulletin, No. 7 (December 1990), pp. 214-215.	
		"Method for Consistent Data Replication for Collection Management in a Dynamic Partially Connected Collection," IBM Technical Disclosure Bulletin, No. 5 (October 1990), pp. 454-464.	
		"Grouping Cached Data Blocks for Replacement Purposes," IBM Technical Disclosure Bulletin (April 1986), pp. 4947-4949.	
		"Zero-Fetch Cycle Branch," IBM Technical Disclosure Bulletin (August 1986), pp. 1265-1270.	
		"Cache Enhancement for Store Multiple Instruction," IBM Technical Disclosure Bulletin (December 1984), pp. 3943-3944.	
		"Dynamic Address Allocation in a Local Area Network," IBM Technical Disclosure Bulletin (May 1983), pp. 6343-6345.	

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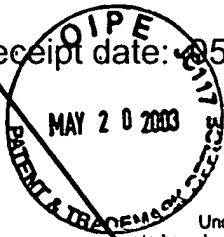
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		"Continuous Read and Write of Multiple Records by Start Stop Buffers between Major and Minor Loops," IBM Technical Disclosure Bulletin (December 1980), pp. 3450-3452.	
		"Read Replicated Data Feature to the Locate Channel Command Word," IBM Technical Disclosure Bulletin (January 1980), p. 3811.	
		"Rapid Access Method for Fixed Block DASD Records," IBM Technical Disclosure Bulletin (September 1977), pp. 1565-1566.	
		"Multimedia Audio on Demand," IBM Technical Disclosure Bulletin, Vol. 37, No. 6B (June 1994), pp. 451-460.	
		"Asynchronous Queued I/O Processor Architecture," IBM Technical Disclosure Bulletin, No. 1 (January 1993), pp. 265-278.	
		"Service Processor Data Transfer," IBM Technical Disclosure Bulletin, No. 11 (April 1991), pp. 429-434.	
		"Hardware Address Relocation for Variable Length Segments," IBM Technical Disclosure Bulletin (April 1981), pp. 5186-5187.	
		"Swap Storage Management," IBM Technical Disclosure Bulletin (February 1978), pp. 3651-3657.	
		"Interface Control Block for a Storage Subsystem," IBM Technical Disclosure Bulletin (April 1975), pp. 3238-3240.	
		"Automated Storage Management," IBM Technical Disclosure Bulletin (February 1975), pp. 2542-2543.	

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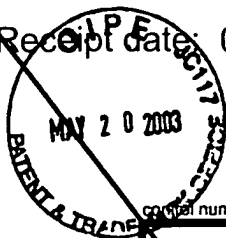
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		"Multiple Memory Accesses in a Multi Microprocessor System," IBM Technical Disclosure Bulletin (November 1981), pp. 2752-2753.	
		"Control Interface for Magnetic Disk Drive," IBM Technical Disclosure Bulletin (April 1980), pp. 5033-5035.	
		"System Organization of a Data Transmission Exchange," IBM Technical Disclosure Bulletin (February 1963), pp. 35-38.	
		"Service Processor Architecture and Microcode Algorithm for Performing Protocol Conversions Start/Stop, BSC, SDLC," IBM Technical Disclosure Bulletin (May 1989), pp. 461-464.	
		"Shared Storage Bus Circuitry," IBM Technical Disclosure Bulletin (September 1982), pp. 2223-2224.	
		"Dynamically Alterable Data Transfer Mechanism for Direct Access Storage Device to Achieve Optimal System Performance," IBM Technical Disclosure Bulletin (June 1978), pp. 39-39.	
		"Multi-Level DASD Array Storage System," IBM Technical Disclosure Bulletin, Vol. 38, No. 6 (June 1995), pp. 23-24.	
		"Redundant Array of Independent Disks 5 Parity Cache Strategies," IBM Technical Disclosure Bulletin, Vol. 37, No. 12 (December 1994), pp. 261-264.	
		"Method for Data Transfer for Raid Subsystem," IBM Technical Disclosure Bulletin, Vol. 39, No. 8 (August 1996), pp. 99-100.	

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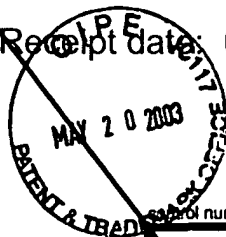
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Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Application Number	09/832,812
		Filing Date	4/12/2001
		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
		Attorney Docket Number	STO-05RI
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		STODOLSKY, D., <i>et al.</i> , "Parity Logging Overcoming the Small Write Problem in Redundant Disk Arrays," 20 <sup>th</sup> Annual International Symposium on Computer Architecture (May 16-19, 1993), pp. 1-12.	
		MOGI, K., <i>et al.</i> , "Hot Block Clustering for Disk Arrays with Dynamic Striping," Proceedings of the 21 <sup>st</sup> VLDB Conference, Zurich, Switzerland (1995), pp. 90-99.	
		DAHLIN, M.D., <i>et al.</i> , "Cooperative Caching: Using Remote Client Memory to Improve File System Performance," First Symposium on Operating Systems Design and Implementation (OSDI) (November 14-17 1994), pp. 267-279.	
		WOOD, D.A., <i>et al.</i> , "An In-Cache Address Translation Mechanism," The 13 <sup>th</sup> Annual International Symposium on Computer Architecture, Tokyo, Japan (June 25 1986), pp. 358-365.	
		CORBETT, P.F., <i>et al.</i> , "Overview of the Vesta Parallel File System," Computer Architecture News, Vol. 21, No. 5 (December 1993), pp. 7-14.	
		PATTERSON, D.A., "Massive Parallelism and Massive Storage: Trends and Predictions for 1995 to 2000," Keynote Address, Second International Conference on Parallel and Distributed Information Systems, San Diego California (January 1993), pp. 6-7.	
		UITERWIJK, A., "RAID Storage System; Superflex 3000 Provides Dynamic Growth," <i>InfoWorld</i> (June 17, 1996), p. N/13.	
		FRANCIS, B., "SuperFlex Unveiled for RAID Market," <i>InfoWorld</i> (September 11, 1995), p. 38.	

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		LEVINE, R., "Know Your RAID? You've Got it Made: The explosion in Network Storage Needs is Driving Business to VARs who Understand RAID Technology," <i>VARBusiness</i> (January 1, 1996).	
		"AMI Introduces RAID Technology Disk Array," <i>Worldwide Computer Product News</i> (March 1, 1996).	
		"American Megatrends Inc. has Introduced FlexRAID, a New Adaptive RAID Technology," <i>TelecomWorldWire</i> (February 23, 1996).	
		"ABL Canada's VT2C Demonstrates Unparalleled Flexibility in a Major Application for the U.S. Government BTG Selected for Billion Dollar ITOP Program," <i>Business Wire</i> (May 24, 1996).	
		"American Megatrends' FlexRAID Advances RAID Technology to the Next Level; Adaptive RAID Combines Significant Firmware and Software Features," <i>PR Newswire</i> (February 22, 1996).	
		"American Megatrends' General Alert Software Maximizes Fault Tolerance; Watchdog Utility Significantly Reduces Reaction Time," <i>PR Newswire</i> (February 16, 1996).	
		"American Megatrends Capitalizes on World Wide Web Presence; AMI Site Open for Business with New Look and On-Line Purchase Options," <i>PR Newswire</i> (January 9, 1996).	
		"AMI Offers Detailed Support For SAF-TE RAID Standard; New Standard Will Reduce Error Reaction Time and Increase RAID System Safety," <i>PR Newswire</i> (October 30, 1995).	
		"American Megatrends and Core International Jointly Develop RAIDStack(TM) Intelligent RAID Controller Board; Combination of AMI MegaRAID (TM) Hardware With Core Technology to Revolutionize RAID Market," <i>PR Newswire</i> (October 26, 1995).	
		"AMI Announces New MegaRAID Ultra RAID Controller; New SCSI PC RAID Controller Breaks Speed and Technology Barriers," <i>PR Newswire</i> (October 3, 1995).	
		CROTHERS, B., "Controller Cards; AMI to Unveil DMI-Compliant RAID Controller," <i>InfoWorld</i> (October 9, 1995).	

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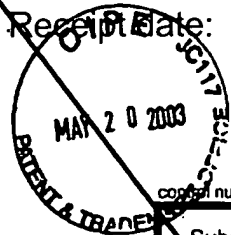
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		Examiner Name	Kim
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		"American Megatrends Joins RAID Advisory Board," <i>PR Newswire</i> (September 20, 1995).	
		CROTHERS, B., "AMI Moves into RAID Market with New Controller Design," <i>InfoWorld</i> (July 17, 1995).	
		GOLD, S., "HP's Smart Auto-RAID Backup Technology," <i>Newsbytes News Network</i> (August 4, 1995), pp. 1-2.	
		SAVAGE, S., et al., "AFRAID - A Frequently Redundant Array of Independent Disks," <i>Usenix Technical Conference</i> (January 22-26, 1996), pp. 27-39.	
		"Departmental Networks; 1996 Buyers Guide/Buyers Guide" <i>LAN Magazine</i> (September 15, 1996).	
		"Miniguide: RAID Products," <i>Optical Memory News</i> (July 16, 1996).	
		WHIPPLE, D., "EMC Leaps ahead in Market for Mainframe Storage," <i>Business Dateline: Boulder County Business Report</i> (June 1996).	
		BURDEN, K., et al., "RAID Stacks up; The Varied Approach of Rascal, Symmetrix and Iceberg Score Well with Diverse Users," <i>Computerworld</i> (February 26, 1996).	
		"EMC's RAID-S Attains an Industry First with RAID Advisory Board Conformance; Unique RAID-S Implementation is First Mainframe/Open Systems Feature to Receive RAID Level 5 Conformance Certification," <i>Business Wire</i> (December 11, 1995).	
		BABCOCK, C., "RAID Invade New Turf," <i>Computerworld</i> (June 19, 1995), p. 186.	

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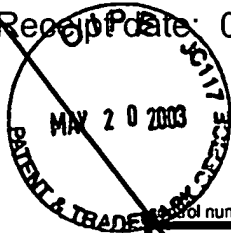
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		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
		Attorney Docket Number	STO-05RI
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		ENTICKNAF, N., "Storing Up Trouble; IBM's Problems in the Disc Array Market," ASAP (May 11, 1995), p. 40.	
		"EMC Brings Top Performance to Mainframe Customers with Smaller Capacity Needs," <i>Business Wire</i> (April 17, 1995).	
		STEDMAN, C., et al., "Discount Days to End for EMC Customers," <i>Computerworld</i> (April 17, 1995), p. 4.	
		LAPOLLA, S., "DEC Broadens Storage Support; Scalable Storageworks Taps Multiplatform Server Data; DEC Storageworks RAID Array 410 RAID Array System; Brief Article; Product Announcement," ASAP, No. 6, Vol. 12 (February 13, 1995), p. 60.	
		STEDMAN, C., et al., "EMC Recasts RAID," <i>Computerworld</i> (January 30, 1995), p. 1.	
		CALLERY, R., "Buying Issues Turned Upside Down; In The RAID World, Products Are Built to Fit the Data. In The Past, IBM Offered One-Size DASD for all Needs," <i>Computerworld</i> (January 30, 1995), p. 78.	
		"Making Up Lost Ground; New Redundant Arrays on Independent Disks Offerings from IBM; Includes Related Articles on Storage Companies, Approaches to RAID and IBM Storage Product Plans; Special Report: Storage," ASAP, Vol. 15; No. 7 (July 1994), p. 613.	
		STEDMAN, C., "New IBM Arrays Fall Short of Rival EMCs Performacne [sic]," <i>Computerworld</i> (June 13, 1994), p. 6.	
		AMBROSIO, J., "IBM to Unveil First Host RAID Device," <i>Computerworld</i> (November 22, 1993), p. 1.	
		NASH, K., "EMC Ups Mainframe Storage Ante," <i>Computerworld</i> (November 16, 1992), p. 8.	

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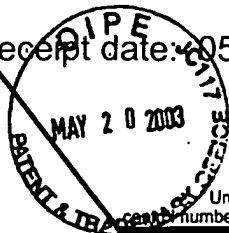
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		SULLIVAN-TRAINOR, M., et al., "Smaller, Faster, but not Cheaper, EMC's Symmetrix Storage Systems Beat IBM's Conventional DASD in Key Areas Except [sic] Cost and Ease of Customizing," <i>Computerworld</i> (June 15, 1992), p. 72.	
		STERLICCHI, J., "US: Outlook; Column" <i>ASAP</i> (February 13, 1992) p. 22.	
		GILLIN, P., "EMC Upgrades 3990-like Disk Array by 60%," <i>Computerworld</i> (January 13, 1992), p. 160.	
		"EMC Brings Revolutionary Disk Array Storage System to Unisys 1100/2200 Market," <i>Business Wire</i> (September 9, 1991).	
		CASEY, M., "In Real Life," <i>Computerworld</i> (August 19, 1991), p. 550.	
		MORAN, R., "PREPARING FOR A RAID-What Are the Benefits of Redundant Arrays of Inexpensive Disks?," <i>Information Week</i> (May 27, 1991), p. 280.	
		"EMC Sees Exceptional Customer Demand for Symmetrix Product Line; March 15 Price Increase Planned," <i>Business Wire</i> (February 13, 1991).	
		TERESKO, J., et al.(ed.), "Next Generation in Data Storage," <i>Industry Week</i> (October 15, 1990), p. 680.	
		"Two Years Ahead of Its Competitors' Projected Delivery Dates, EMC Unveils First 'RAID' Computer Storage System," <i>Business Wire</i> (September 25, 1990).	
		"Best System Corp. purchases Encore Infinity R/T for 3D Virtual Reality [sic] in Motion Simulation Rides," <i>Business Wire</i> (September 17, 1996).	
		"Encore Expands Into New Gaming Market with Best System Inc. and Pacific System Integrators Inc.," <i>Business Wire</i> (September 10, 1996).	

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/H.K./		"ENCORE COMPUTER CORPORATION: South African Farm Cooperative Buys Encore Infinity Data Storage System," <i>M2 Presswire</i> (September 9, 1996).	
/H.K./		"Memorex Telex Sells Encore Infinity SP to Haindl," <i>Business Wire</i> (September 3, 1996).	
/H.K./		"Encore Sells Data Sharing Infinity Storage System to Farm Cooperative in South Africa," <i>Business Wire</i> (August 20, 1996).	
/H.K./		"Encore Reports Second Quarter Financial Results; Product Revenues Increase - Service Declines," <i>Business Wire</i> (August 19, 1996).	
/H.K./		"Encore Computer Corp. Sells Infinity SP30 to 10 <sup>th</sup> Largest Software Company in Germany," <i>Business Wire</i> (July 11, 1996).	
/H.K./		"Encore Sells Real-Time Systems to the French Navy, DCN-Direction Des Constructions Navales \$1 Million Contract," <i>Business Wire</i> (July 9, 1996).	
/H.K./		"Gulf States Toyota, Inc. purchases Encore's Infinity SP Storage Processor with Data Sharing and Backup/Restore Capabilities," <i>Business Wire</i> (June 25, 1996).	
/H.K./		"Encore Awarded a \$3 million Contract for Real-Time Computer Systems from EDF Nuclear Power in France," <i>Business Wire</i> (June 25, 1996).	
/H.K./		"Pepsi-Cola General Bottlers Takes Advantage of Data Sharing Capability of Encore's Infinity SP30," <i>Business Wire</i> (June 11, 1996).	
/H.K./		"Memorex Telex (UK) Ltd. to Sell Encore Infinity SP Storage Processors," <i>Business Wire</i> (June 3, 1996).	
/H.K./		"Amcotec Sells Encore Infinity SP30 to General Accident South Africa," <i>Business Wire</i> (May 28, 1996).	

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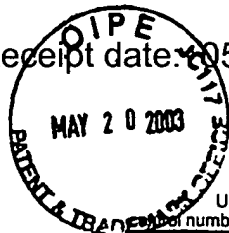
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		Application Number	09/832,812
		Filing Date	4/12/2001
		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
Examiner Name	Kim		
Attorney Docket Number	STO-05RI		
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/H.K./		"KPT Inc. Purchases Encore Infinity SP30 Storage Processor for Print Server Applications," <i>Business Wire</i> (May 14, 1996).	
/H.K./		MCHUGH, J. "When It Will Be Smart to be Dumb," <i>Forbes</i> (May 6, 1996).	
/H.K./		"Sikorsky Purchases Encore Computer Systems for Helicopter Simulation," <i>Business Wire</i> (April 22, 1996).	
/H.K./		"Encore Reports Year End Financial Results...\$100M Financing Completed," <i>Business Wire</i> (April 16, 1996).	
/H.K./		"Digital and Encore Computer to Market Infinity Gateway for AlphaServer 8000 Systems," <i>Business Wire</i> (April 10, 1996).	
/H.K./		"ENCORE GETS CONTRACT," <i>Sun-Sentinel</i> (March 26, 1996), p. 3D.	
/H.K./		"Northrop Grumman Purchases Encore Systems for U.S. and French Navy E-2C Project," <i>Business Wire</i> (March 25, 1996).	
/H.K./		"Encore Announces a Simple, Low Cost, Direct Internet Data Facility to Share Mainframe and Open Systems Data," <i>Business Wire</i> (February 29, 1996).	
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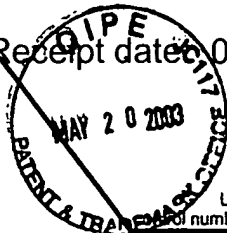
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		Filing Date	4/12/2001
		First Named Inventor	Sarkozy et al.
		Group Art Unit	2185
		Examiner Name	Kim
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		"Encore Wins Award Valued at Over \$1M for PAC-3 Missile," <i>Business Wire</i> (January 29, 1996).	
		"Encore Wins Contract Valued at US\$500,000 from Ceselsa," <i>M2 Presswire</i> (January 25, 1996).	
		"Encore Wins Award Valued at \$500 Thousand from CESELSA," <i>Business Wire</i> (January 23, 1996).	
		"Encore Announces World's Fastest Single Board Computer System," <i>Business Wire</i> (January 10, 1996).	
		"Encore Announces Infinity R/T Sale to ENEL in Italy," <i>Business Wire</i> (December 18, 1995).	
		"Encore Extends Storage Presence to Argentina," <i>M2 Presswire</i> (December 12, 1995).	
		"Encore Extends Storage Presence to Argentina; PANAM TECH to Sell Infinity SP Storage Processors," <i>Business Wire</i> (December 11, 1995).	
		"Encore Announces Sale to Agusta Sistemi in Italy; Alpha AXP-Based Infinity R/T Selected for Simulation," <i>Business Wire</i> (December 4, 1995).	
		"Encore Announces System Sale to Letov in Czech Republic," <i>Business Wire</i> (November 27, 1995).	

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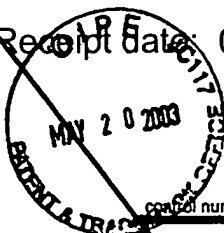
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		Group Art Unit	2185
		Examiner Name	Kim
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		DEPOMPA, B. "EMC Device Does Two Jobs-New Enterprise Storage Platform Can Handle Data from Mainframes and Unix Computer Systems," <i>Information Week</i> (November 20, 1995), p. 163.	
		"Encore Signs Major Distributor in Sweden; MOREX to Sell Infinity SP Storage Family," <i>Business Wire</i> (November 13, 1995).	
		STEDMAN, C., "EMC to Open Up Disk Arrays; Symmetrix 5000 Will Store Data From Multiple Platforms," <i>Computerworld</i> (November 6, 1995), p. 14.	
		"Encore Ships Systems to AeroSimulation; Contract Valued at \$1 Million Plus," <i>Business Wire</i> (October 31, 1995).	
		"Encore Wins Award from Lockheed Martin; \$2.4 Million Contract Awarded for MTSS Program," <i>Business Wire</i> (October 24, 1995).	
		"Encore Sets Agreement with Bell Atlantic Business Systems Services for Storage Systems," <i>Business Wire</i> (October 16, 1995).	
		"Encore Accelerates Paradigm Shift; Intelligent Storage Controllers Outfeature and Outperform All Fixed Function DASD Controllers," <i>Business Wire</i> (October 9, 1995).	
		"Encore Infinity SP40 Sets Industry Standard Performance Record for DASD Controllers," <i>Business Wire</i> (October 9, 1995).	
		"News Shorts," <i>Computerworld</i> (October 9, 1995), p.8.	

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		First Named Inventor	Sarkozy et al.		
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		CAO, P., et al., "The TickerTAIP Parallel RAID Architecture," HP Laboratories Technical Report (November 1992), pp. 1-20.	
		BERSON, S., et al., "Fault Tolerant Design of Multimedia Servers," SIGMOD (1995).	
		CHEN, P.M., et al., "RAID: High Performance, Reliable Secondary Storage," ACM Computing Surveys, Vol. 26, No. 2 (June 1994), pp. 146-185.	
		STAEIN, C., et al., "Clustering Active Disk Data to Improve Disk Performance," Department of Computer Science (September 20, 1996), pp. 1-25.	
		SELTZER, M., et al., "An Implementation of a Log-Structured File System for UNIX," 1993 Winter USENIX (January 25-29, 1993), pp. 7-18.	
		KOHL, J.T., et al., "HighLight: Using a Log-Structured File System for Tertiary Storage Management," (November 20, 1992), pp. 1-15.	
		BERSON, S., et al., "Staggered Striping in Multimedia Information Systems," Computer Science Department Technical Report, University of California (December 1993), pp. 1-24.	
		POLYZOIS, C.A., et al., "Disk Mirroring with Alternating Deferred Updates," Proceedings of the 19 <sup>th</sup> VLDB Conference, Dublin, Ireland (1993), pp. 604-617.	
		STODOLSKY, D., et al., "Parity Logging: Overcoming the Small Write Problem in Redundant Disk Arrays," 20 <sup>th</sup> Annual International Symposium on Computer Architecture (May 16-19, 1993), pp. 1-12.	

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		GRAY, J., et al., "Parity Striping of Disc Arrays: Low-Cost Reliable Storage with Acceptable Throughput," Proceedings of the 16 <sup>th</sup> VLDB Conference, Brisbane, Australia (1990), pp. 148-161.	
		HARTMAN, J. H. "The Zebra Striped Network File System," Dissertation, University of California At Berkeley (1994), pp. i-ix and 1-147.	
		"Data Link Provider Interface Specification," OSI Work Group, UNIX International (August 20, 1991), pp. 1-174 and clxxv-vii.	
		"Veritas® Volume Manager (VxVM®): User's Guide, Release 2.3," Solaris™ (August 1996).	
		"IEEE Standard Dictionary of Measures to Produce Reliable Software," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (April 30, 1989), pp. 1-37.	
		"IEEE Standard for Software User Documentation," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (August 22, 1988), pp. 1-16.	
		"IEEE Standard for Software Unit Testing," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (December 29, 1986), pp. 1-24.	
		"IEEE Guide for Software Quality Assurance Planning," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (February 1986), pp. 1-31.	
		"Fourteenth IEEE Symposium on Mass Storage Systems: Storage at the Forefront of Information Infrastructures," Second International Symposium, Monterey, California (KAVANAUGH, Mary E. (ed.)) (September 11-14, 1995), pp. v-xi and 1-369.	

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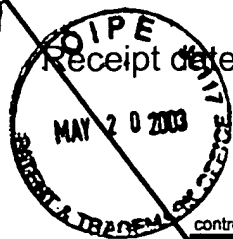
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Receipt date: 05/20/2003.

09832812 - GAU: 2185

PTO/SB/08B (10-01)  
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Substitute for form 1449B/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Application Number	09/832,812		
		Filing Date	4/12/2001		
		First Named Inventor	Sarkozy et al.		
		Group Art Unit	2185		
		Examiner Name	Kim		
Sheet	21	of	22	Attorney Docket Number	STO-05RI

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		"IEEE Guide to Software Design Descriptions," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (May 25, 1993), pp. i-v and 1-22.	
		"IEEE Guide for the Use of IEEE Standard Dictionary of Measures to Produce Reliable Software," Institute of Electrical and Electronics Engineers, Inc., New York, NY (June 12, 1989), pp. 1-96.	
		"IEEE Guide to Software Configuration Management," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (September 12, 1988), pp. 1-92.	
		"IEEE Standard for Software Quality Assurance Plans," Institute of Electrical and Electronics Engineers, Inc., New York, NY (August 17, 1989), pp. 1-12.	
		"IEEE Standard for Software Test Documentation," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (December 3, 1982), pp. 1-48.	
		COLEMAN, S. and MILLER, S. (eds.), "Mass Storage System Reference Model, Version 4," IEEE Technical Committee on Mass Storage Systems and Technology (May 1990), pp. 1-38.	
		WILKES, J., et al., "Introduction to the Storage Systems Program," Computer Systems Laboratory, Hewlett Packard Laboratories (August 10, 1995), pp. 1-37.	
		IEEE Storage Systems Standards Working Group (Project 1244), "Reference Model for Open Storage Systems Interconnection: Mass Storage Systems Reference Model, Version 5," The Institute of Electrical and Electronics Engineers, Inc., New York, NY (September 8, 1994).	
		BEDOLL, R. F., "Mass Storage Support for Supercomputing," IEEE (September 1988), pp. 217-221.	
		BHIDE, A., et al., "An Efficient Scheme for Providing High Availability," Association for Computing Machinery SIGMOD (April 1992), pp. 236-245.	

Examiner Signature	/Hong Kim/	Date Considered	01/12/2009
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	22	of	22
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**Complete if Known**

Application Number	09/832,812
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<b>Filing Date</b>	4/12/2001
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<b>First Named Inventor</b>	Sarkozy et al.
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Group Art Unit	2185
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Examiner Name	Kim
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Attorney Docket Number	STO-05R
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## OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

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Receipt date: 08/02/2001

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE

Atty Docket: STOCOM P05AUSRI

Serial No.: 09/832,812

Filing Date: April 12, 2001

Examiner:

Group: 2185

Applicant: STORAGE COMPUTER CORPORATION

09/832,812 - GAU: 2185



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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
(Use several sheets if necessary)

01/12/2009

U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Date	Name	Sub- Class	Filing Date, if Appropriate
	4,092,732	05/30/1978	OUCHI	364/900	
	4,761,785	08/02/1988	CLARK et al.	371/51	
	5,644,347	08/06/1996	YANAI et al.	395/489	
	5,574,851	11/12/1996	RATHUNDE	395/182.05	
	5,615,352	03/25/1997	JACOBSON et al.	395/441	
	5,649,152	07/15/1997	OHRAN et al.	395/441	
	5,664,187	09/02/1997	BURKES et al.	395/621	
	5,809,224	09/15/1998	SCHULTZ et al.	395/182.05	
	5,857,112	01/05/1999	HASHEMI et al.	395/828	
	5,890,204	03/30/1999	OFER et al.	711/111	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Date	Country	Sub- Class	Class	Translation Yes No
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

HSIAO, Hui-I and David J. DeWITT, "Chained Declustering: A New Availability Strategy for Multiprocessor Database Machines", Computer Sciences Department of the University of Wisconsin, Madison, WI 53706, 1990, pp. 456-465.

LI, Chung-Sheng, Ming-Syan CHEN, Philip S. YU and Hui-I HSIAO, "Combining Replication and Parity Approaches for Fault-Tolerant Disk Arrays", IBM Thomas J. Watson Research Center, P. O. Box 704, Yorktown Heights, NY 10598, April 1994, pp. 360-367.

"Optimal Data Allotment to Build High Availability and High Performance Disk Arrays", IBM Technical Disclosure Bulletin, May 1994, pp. 75-80.

Examiner

/Hong Kim/

Date Considered

01/12/2009

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet 1 of 1

## **Complete if Known**

Application Number	09/832,812
Filing Date	04/12/2001
First Named Inventor	SARKOZY, et al.
Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-08RI

## **OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	JILKE, W., "Disk Array Mass Storage Systems: The New Opportunity," Amperif Corporation, September 25, 1986.	
	2	JILKE, W., "Viewpoint: The Death of Large Disks?" and "Agenda," Gartner Group Third Annual Computer Storage Conference, Phoenix, Arizona, March 12-13, 1987.	

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# ~~INFORMATION DISCLOSURE STATEMENT BY APPLICANT~~

**(Use as many sheets as necessary)**

**Complete if Known**

Application Number	09/832,812
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<b>Filing Date</b>	<b>April 12, 2001</b>
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First Named Inventor	Sarkozy, et al.
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Art Unit	2186
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Examiner Name	Kim
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Attorney Docket Number	STO-05RI
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Sheet	1	of	2
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## U.S. PATENT DOCUMENTS

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**FOREIGN PATENT DOCUMENTS**

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Examiner Signature	/Hong Kim/	Date Considered	01/12/2009
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 2

### Complete if Known

Application Number 09/832,812

Filing Date April 12, 2001

First Named Inventor Sarkozy, et al.

Art Unit 2186

Examiner Name Kim

Attorney Docket Number STO-05R1

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### NON PATENT LITERATURE DOCUMENTS

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	1	"MEMORANDUM OPINION," Storage Computer Corp. v. Veritas Software Corp., et al., Civil Action No. 3:01-CV-2078-N, IN THE UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF TEXAS DALLAS DIVISION, (January 27, 2003) pp. 1-14.	
	2	"EXPERT REPORT OF STEVEN SCOTT," Storage Computer Corp. v. Veritas Software Corp. and Veritas Software Global Corporation, Civil Action No. 3:01-CV-2078-N, IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF TEXAS DALLAS DIVISION, (March 14, 2003) pp. 1-32.	
	3	KLORESE, R., "Enhancing Hardware RAID with VERITAS Volume Manager," Veritas (1994) 7 pages.	
	4	STONEBRAKER, M., et al., "Distributed RAID - A New Multiple Copy Algorithm," Proc. of the 6th International Conference on Data Engineering (February 1990) pp. 1-24.	
	5	"Reliability, Availability, and Serviceability in the SPARCcenter 2000E and the SPARCserver 1000E," Sun Technical White Paper, (January 1995) pp. 1-20.	
/H.K./	6	CALLAGHAN, B., et al., "NFS Version 3 Protocol Specification," Sun Microsystems, Inc., (June 1995) pp. 1-126.	
/H.K./	7	LEACH, P., et al., "CIFS: A Common Internet File System," Microsoft Internet Developer, (November 1996) pp. 1-10.	
/H.K./	8	PAWLOWSKI, B., et al., "NFS Version 3 Design and Implementation," Usenix Technical Conference (June 9, 1994) pp. 1-15.	
/H.K./	9	SANDBERG, R., et al., "Design and Implementation of the Sun Network File System," Usenix Technical Conference, (1985) pp. 1-12.	
/H.K./	10	WALSH, D., et al., "Overview of the Sun Network File System," Usenix Technical Conference, (1985) pp. 117-124.	
/H.K./	11	TANENBAUM, A., "Distributed Operating Systems," New Jersey, Prentice Hall (1995).	

Examiner Signature	/Hong Kim/	Date Considered	01/12/2009
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	1
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**Complete if Known**

<b>Application Number</b>	09/832,812
<b>Filing Date</b>	04/12/2001
<b>First Named Inventor</b>	SARKOZY, et al
<b>Group Art Unit</b>	2185
<b>Examiner Name</b>	Kim
<b>Attorney Docket Number</b>	STO-0581

## U.S. PATENT DOCUMENTS

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**Examiner  
Signature**

/Hong Kim/

Date  
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1 Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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**(use as many sheets as necessary)**

Sheet	1	of	2
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**Complete if Known**

<b>Application Number</b>	09/832,812
<b>Filing Date</b>	04/12/2001
<b>First Named Inventor</b>	SARKOZY, et al.
<b>Group Art Unit</b>	2185
<b>Examiner Name</b>	TBD
<b>Attorney Docket Number</b>	STO-0551

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1	5,301,297		Menon et al.	04/05/1994	
	2	5,392,244		Jacobson et al.	02/21/1995	
	3	5,469,453		Glider et al.	11/21/1995	
	4	5,524,204		Verdoorn, Jr.	06/04/1996	
	5	5,659,704		Burkes et al.	08/19/1997	<b>RECEIVED</b>  <b>FEB 14 2002</b>
	6	5,699,503		Bolosky et al.	12/16/1997	
	7	5,774,641		Islam et al.	06/30/1998	<b>Technology Center 2100</b>
	8	6,073,222		Ohran	06/06/2000	
	9	6,076,142		Corrington et al.	06/13/2000	

**FOREIGN PATENT DOCUMENTS**

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**Examiner  
Signature**

/Hong Kim/

Date  
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<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO		<b>Complete if Known</b>	
		Application Number	09/832,812
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Filing Date	04/12/2001
		First Named Inventor	SARKOZY, et al
		Group Art Unit	2185
		Examiner Name	TBD
		Attorney Docket Number	STO-05R
Sheet	2	of	2

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	10	"Method for Background Parity Update in a Redundant Array of Inexpensive Disks (RAID)", IBM Technical Disclosure Bulletin, Oct. 1992, pp. 139-141.	
	11	"Host Operation Precedence with Parity Update Groupings for Raid Performance", IBM Technical Disclosure Bulletin, Mar. 1993, pp. 431-433.	
	12	"Parity Preservation for Redundant Array of Independent Direct Access Storage Device Data Loss Minimization and Repair", IBM Technical Disclosure Bulletin, Mar. 1993, pp. 473-478.	
	13	"LRAID: Use of Log Disks for an Efficient RAID Design", IBM Technical Disclosure Bulletin, Feb. 1994, pp. 19-20.	
	14	"Hybrid Redundancy [sic] Direct-Access Storage Device Array with Design Options", IBM Technical Disclosure Bulletin, Feb. 1994, pp. 141-148.	
	15	"Performance Efficient Multiple Logical Unit Number Mapping for Redundant Array of Independent Disks", IBM Technical Disclosure Bulletin, May 1996, pp. 279-274.	
	16	WILKES, ET AL, "The HP AutoRAID Hierarchical Storage System", ACM Transactions on Computer Systems, Feb. 1996, Vol. 14, No. 1.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> B <i>(use as many sheets as necessary)</i>		Application Number	09/832,812
		Filing Date	04/12/2001
		First Named Inventor	SARKOZY, [unclear]
		Group Art Unit	2185
		Examiner Name	TBD
Sheet 1 of 2	Attorney Docket Number	STO-0551	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1	5,519,844		Stallmo	05/21/1996	
	2	5,546,558		Jacobson, et al.	08/13/1996	

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

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Application Number	09/832,812
Filing Date	04/12/2001
First Named Inventor	SARKOZY, et al.
Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-05R

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	3	Massiglia, Raul, ed., "The RAIDbook, a Source Book for Disk Array Technology, 4 <sup>th</sup> ed.," 08/08/1994, pp. 3-22, 117-153, The RAID Advisory Board, St. Peter, MN	
	4	DEVOE, DEBORAH, "Vendors to unveil RAID storage systems," Storage Dimensions' SuperFlex 3000, Falcon Systems' RealTime, (Brief Article), 03/25/1996, pp. 42(1), v18 n13, InfoWorld Publishing Company 1996.	
	5	"HP's Smart Auto-RAID Backup Technology" Newsbytes, 08/04/1995, pNEW08040012, Newsbytes Inc. 1995.	
	6	CROWTHERS, EDWARD and LEADER, JOE, "RAID technology advances to the next level," Computer Technology Review, 03/1996, pp. 45, v16 n3.	
	7	"Fault-Tolerant Storage for Non-Stop Networks," Storage Dimensions, 08/15/1995, pp.42-43.	
	8	"Super Flex 3000 Provides Dynamic Growth," InfoWorld, Product Review, 06/17/1996, v18 n25 pp.N13.	

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Sheet 1 of 10

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Application Number	09/832,812
Filing Date	04/12/2001
First Named Inventor	SARKOZY, et al.
Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-05RI

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		Number	Kind Code* (if known)			
	1	3,449,718		Woo	06/10/1969	
	2	3,876,978		Bossen, et al.	04/08/1975	
	3	4,044,328		Herff	08/23/1977	
	4	4,228,496		Katzman, et al.	10/14/1980	
	5	4,410,942		Milligan, et al.	10/18/1983	
	6	4,425,615		Swenson, et al.	01/10/1984	
	7	4,433,388		Oosterbaan	02/21/1984	
	8	4,467,421		White	08/21/1984	
	9	4,590,559		Baldwin, et al.	05/20/1986	
	10	4,636,946		Hartung, et al.	01/13/1987	
	11	4,644,545		Gershenson	02/17/1987	
	12	4,656,544		Yamanouchi	04/07/1987	
	13	4,722,085		Flora, et al.	01/26/1988	
	14	4,817,035		Timsit	03/28/1989	
	15	4,849,929		Timsit	07/18/1989	
	16	4,849,978		Dishon, et al.	07/18/1989	
	17	4,903,218		Longo, et al.	02/20/1990	
	18	4,933,936		Rasmussen, et al.	06/12/1990	

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Application Number	09/832,812
Filing Date	04/12/2001
First Named Inventor	SARKOZY, et al.
Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-05RI

19	4,934,823	Okami	06/19/1990
20	4,942,575	Goodlander, et al.	04/17/1990
21	4,993,030	Krakauer, et al.	02/12/1991
22	4,994,963	Rorden, et al.	02/19/1991
23	5,072,378	Manka	12/10/1991
24	5,134,619	Henson, et al.	07/28/1992
25	5,197,139	Emma, et al.	03/23/1993
26	5,210,824	Putz, et al.	05/11/1993
27	5,257,367	Goodlander, et al.	10/26/1993
28	5,274,645	Idleman, et al.	12/28/1993
29	5,285,451	Henson, et al.	02/08/1994
30	5,313,631	Kao	05/17/1994
31	5,315,708	Eidler, et al.	05/24/1994
32	5,329,619	Pagé, et al.	07/12/1994
33	5,367,647	Coulson, et al.	11/22/1994
34	5,398,253	Gordon	03/14/1995
35	5,412,661	Hao, et al.	05/02/1995
36	5,416,915	Mattson, et al.	05/16/1995
37	5,418,921	Cortney, et al.	05/23/1995
38	5,420,998	Horning	05/30/1995
39	5,423,046	Nunnolley, et al.	06/06/1995

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Filing Date	04/12/2001
First Named Inventor	SARKOZY, et al.
Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-05RI

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40	5,448,716	Schultz, et al.	08/08/1995	
41	5,483,415	Kaczeus, Sr., et al.	01/09/1996	
42	5,495,607	Pisello, et al.	02/27/1996	
43	5,499,337	Gordon	03/12/1996	
44	5,519,831	Holzhammer	05/21/1996	
45	5,519,853	Moran, et al.	06/21/1996	
46	5,530,829	Beardsley, et al.	06/25/1996	
47	5,530,845	Hatt, et al.	06/25/1996	
48	5,537,534	Voigt, et al.	07/16/1996	
49	5,537,567	Galbraith, et al.	07/16/1996	
50	5,537,588	Engelmann, et al.	07/16/1996	
51	5,542,065	Burkes, et al.	07/30/1996	
52	5,551,002	Rosich, et al.	08/27/1996	
53	5,551,003	Mattson, et al.	08/27/1996	
54	5,564,116	Arai, et al.	10/08/1996	
55	5,568,628	Satoh, et al.	10/22/1996	
56	5,572,659	Iwasa, et al.	11/05/1996	
57	5,572,660	Jones	11/05/1996	
58	5,583,726	Tanaka	12/03/1996	
59	5,583,876	Kakuta	12/10/1996	
60	5,586,291	Lasker, et al.	12/17/1996	

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Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-05RI

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Sheet 4 of 10

61	5,615,353	Lautzenheiser	03/25/1997
62	5,621,882	Kakuta	04/15/1997
63	5,632,027	Martin, et al.	05/20/1997
64	5,642,337	Oskay, et al.	06/24/1997
65	5,650,969	Nijima, et al.	07/22/1997
66	5,671,439	Klein, et al.	08/23/1997
67	5,689,678	Stallmo, et al.	11/18/1997
68	5,696,934	Jacobson, et al.	12/09/1997
69	5,720,027	Sarkozy, et al.	02/17/1998
70	5,732,238	Sarkozy	03/24/1998
71	5,742,762	Scholl, et al.	04/21/1998
72	5,758,074	Marlin, et al.	05/26/1998
73	5,787,459	Stallmo, et al.	07/28/1998
74	5,790,774	Sarkozy	08/04/1998
75	5,794,229	French, et al.	08/11/1998
76	5,944,789	Tzelnic, et al.	08/31/1999
77	6,098,128	Velez-McCaskey, et al.	08/01/2000

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		Office <sup>3</sup>	Number <sup>4</sup>				
	78	EP	0201330 A	Thinking Machines Corp.	11/12/1986		
	79	EP	0274817 A	Hartness	07/20/1988		
	80	GB	2086625 A	Western Electric	05/12/1982		
	81	JP	56-074807 A	Hitachi Seisakusho K.K.	06/20/1981	with English Abstract	
	82	JP	61-62920 A	Hitachi LTD.	03/31/1986	with English Abstract	
	83	JP	59-085564	Ricoh Co LTD	05/17/1984	with English Abstract	
	84	JP	63-278132	Matsushita Graphic Commun Syst Inc	11/15/1988	with English Abstract	
	85	JP	57-185554	Toshiba Corp.	11/15/1982	with English Abstract	
	86	JP	02-148125	Yokogawa Medical Syst LTD	06/07/1990	with English Abstract	
	87	JP	60-254318	Toshiba Corp	12/16/1985	with English Abstract	

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Sheet 6 of 10

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Attorney Docket Number	STO-05RI

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	88	MASSIGLIA, PAUL, "RAID Levels - Yesterday's Yardstick," Computer Technology Review, April 1996, pp. 42.	
	89	PATTERSON, DAVID A.; GIBSON, GARTH; and KATZ, RANDY H., "A Case for Redundant Arrays of Inexpensive Disks (RAID), Report No. UCB/CSD 87/391, December 1987.	
	90	BHARGAVA, BHARAT; FRIESEN, KARL; HELAL, ABDELSALAM; and RIEDL, JOHN, "Adaptability experiments in the RAID distributed database system" (Abstract only), Symposium on Reliability in Distributed Software and Database Systems, 10/1990, IEEE cat n 90CH2912-4, pp. 76-85.	
	91	KIM, MICHELLE Y., "Synchronized Disk Interleaving," IEEE Trans. on Computers, Vol. C-35, No. 11, Nov. 1986.	
	92	"LANser MRX100: Intelligent Disk Subsystem" Sanyo Icon, 1992, (2 pages).	
	93	"LANser MRX300: Intelligent Disk Subsystem" Sanyo Icon, 1992, (2 pages).	
	94	"LANser MRX500: Intelligent Disk Subsystem" Sanyo Icon, 1992, (2 pages).	
	95	"LANser MRX500FT: Fault Tolerant Intelligent Disk Subsystem" Sanyo Icon, 1992, (2 pages).	
	96	"LANser MRX: A New Network Technology Breakthrough," Sanyo Icon, 1992, (5 pages).	
	97	IBM Technical Disclosure Bulletin, October 1986, Vol. 29, No. 5, pp. 2102-2107, "Method for Scheduling Writes in a Duplexed DASD Subsystem."	

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**INFORMATION DISCLOSURE  
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Sheet

7

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10

Application Number

09/832,812

Filing Date

04/12/2001

First Named Inventor

SARKOZY, et al.

Group Art Unit

2185

Examiner Name

TBD

Attorney Docket Number

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98	IBM Technical Disclosure Bulletin 5484, April 1983, "Managing Memory to DASD Data Recording."	
99	JILKO, WILLI, "Disk Array Mass Storage Systems," 30 September 1986.	
100	IBM Technical Disclosure Bulletin, Vol. 24(2), July 1981, pp. 986-987, "Efficient Mass Storage Parity Recovery Mechanism," (Lawlor).	
101	IBM Technical Disclosure Bulletin, September 1973, pp. 1122-1126, "Bidirectional Minimum Seek."	
102	Memos to ANSI X3T9.2 from Committee on Command Queueing, including revision 2 dated 16 <sup>th</sup> June 1987 and revision 4 dated 1 <sup>st</sup> October 1987.	
103	La VIOLETTE, P., et al., "MCU architecture facilitates disk controller design" (whole article), Wescon Proceedings, San Francisco, 19 <sup>th</sup> -22 <sup>nd</sup> November 1985, vol. 29, pp. 1-9, New York, USA	
104	Conference Record for Elect 87 and Mini/Micro Northeast-87 held on 7 <sup>th</sup> to 9 <sup>th</sup> April 1987, New York, US, pp. 1-8, Bill Moren (Ciprico, Inc): "Mass Storage Controllers and Multibus® II."	
105	KIM, M.Y., "Parallel Operation of Magnetic Disk Storage Devices, Synchronized Disk Interleaving," Proceedings in the fourth International Workshop on Data Base Machines, 1985, pp. 300-329.	
106	MOREN, BILL, "SCSI-2 and Parallel Disk Drive Arrays," Technology Update, 1990, Ciprico, Plymouth, MN.	
107	MOREN, BILL, "SCSI-2 A PRIMER," 1989.	
108	"Parallel Disk Array Controller," "The Rimfire 6600 Approach," "NetArray: Redundant Disk Array for NetWare™ File Servers," and "Rimfire 5500/Novell 386 Benchmarks," 1991, Ciprico, Plymouth, MN.	

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Sheet 8 of 10

Application Number	09/832,812
Filing Date	04/12/2001
First Named Inventor	SARKOZY, et al.
Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-09832812



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109	O'BRIEN, JOHN, "RAID 7 Architecture Features Asynchronous Data Transfers," Computer Technology Review, Winter 1991.	
110	Seminar on StorComp™ Disk Array Development Systems, Storage Computer Corporation, Nashua, NH, 1991.	
111	"RAID Aid: A Taxonomic Extension of the Berkeley Disk Array Schema," Storage Computer Corporation, 1991.	
112	GAMERL, MICHAEL (Fujitsu America Inc.), "The bottleneck of many applications created by serial channel disk drives is overcome with PTDs, but the price/Mbyte is high and the technology is still being refined," Hardcopy, February 1987.	
113	The IBM 3850: "A mass storage system with disk characteristics" and "Design Aspects", Proceedings of the IEEE, V63(8), pp. 1166-1175, August 1975.	
114	KATZ, GIBSON, and PATTERSON, "Disk System Architectures for High Performance Computing", IEEE Log number 8932978, IEEE Journal, pp. 1842-1868, December 1989.	
115	Advances in Computers, Edited by Marshall Yovits, Vol. 27, pp. 157-206, A Reference Model for Mass Storage Systems, Academic Press 1988.	
116	"Page Fault Handling in Staging Type of Mass Storage Systems", IBM Technical Disclosure Bulletin, October 1977, pp. 1710-1711.	
117	"Controlling Error Propagation in a Mass Storage System Serving a Plurality of CPU Hosts", IBM Technical Disclosure Bulletin, May 1977, pp. 4518-4519.	
118	"Capacity Analysis of the Mass Storage System", IBM Systems Journal, Vol. 20(3), 1981.	
119	Digital Technical Journal stating how the DEC VAX Cluster System works, No. 5, September 1987, p. 7.	

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Application Number

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STO-05RI

120 Digital Technical Journal stating how the DEC VAX Cluster System works, No. 8, February 1989, p. 25.

121 Digital Technical Journal stating how the DEC VAX Cluster System works, No. 8, February 1989, p. 8.

122 CRAY Y-MP Computer System (Technical Feature Description), February 1988.

123 HOROWITZ & HILL, "The Art of Electronics, 2<sup>nd</sup> ed.", Cambridge University Press, 1990, pp. 712-4, 733-4.

124 FISHER, SUSAN E., "RAID System Offers GUI, Flexible Drive Function", (Pacific Micro Data Inc's Mast VIII) (Brief Article), PC Week, April 25, 1994, v11 n16 p 71(1). Copyright: Ziff Davis Publishing Company 1994.

125 ENOS, RANDY, "Choosing a RAID Storage Solution", (included related glossary and related articles on open support) (Special Report: Fault Tolerance), LAN Times, September 19, 1994, v11 n19 p 66(3). Copyright: McGraw Hill, Inc. 1994.

126 MOREN, WILLIAM D. (Ciprico Inc), "Intelligent Controller for Disk Drives Boosts Performance of Micros," Computer Technology Review, VI (1986), Summer, no. 3, Los Angeles, CA, USA, pp. 133-139.

127 DAVY, L. N., "Dual movable-head assemblies," Research Disclosure, no. 153, January 1977, pp. 6-7, Havant Hampshire, GB.

128 SCOOROS, T., "Single-board controller interfaces hard disks and backup media," Electronics International, vol. 54, no. 10, May 1981, pp. 160-163, New York, US.

129 ITO, Y., et al., "800 mega byte disk storage system development," Review of Electrical Communication Laboratories, vol. 28, no. 5-6, May-June 1980, pp. 361-367, Tokyo, JP.

130 IBM Technical Disclosure Bulletin, vol. 15, No. 4, September 1972, pp. 1128-1130, New York, US; N. F. BRICKMAN et al.: "Error-correction system for high-data rate systems."

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Sheet 10 of 10

## Complete if Known

Application Number	09/832,812
Filing Date	04/12/2001
First Named Inventor	SARKOZY, et al.
Group Art Unit	2185
Examiner Name	TBD
Attorney Docket Number	STO-05RI

131	IBM Technical Disclosure Bulletin, vol. 17, no. 4, September 1974, pp. 993-995, New York, US; C.E. GIFFORD, et al.: "Memory board address interleaving."
132	IBM Technical Disclosure Bulletin, vol. 24, no. 6, November 1981, pp. 2769-2770, New York, US; A.R. Barsness et al.: "Longitudinal parity generation for single-bit error correction."
133	PATTERSON, DAVID A.; CHEN, PETER; GIBSON, GARTH; and KATZ, RANDY H., "Introduction to Redundancy Arrays of Inexpensive Disks (RAID)", COMPCON Spring: 34 <sup>th</sup> Computer Soc Intl Conf: Intellectual Leverage; San Francisco, CA; Feb/Mar 1989; IEEE (Cat no 89CH2686-4).
134	FRIEDMAN, MARK B., "RAID Keeps Going and Going and . . ." IEEE Spectrum, April 1996.

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Sheet 1 of 2

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		Number	Kind Code <sup>2</sup> (if known)			
	1	5,148,432		Gordon, et al.	09/15/1992	
	2	RE34,100		Hartness	10/13/1992	
	3	5,163,131		Row, et al.	11/10/1992	
	4	5,220,569		Hartness	06/15/1993	
	5	5,305,326		Solomon, et al.	04/19/1994	
	6	5,371,743		DeYesso, et al.	12/06/1994	
	7	5,396,339		Stern, et al.	03/07/1995	columns 23-876, containing software code, not included
	8	5,452,444		Solomon, et al.	09/19/1995	
	9	5,485,579		Hitz, et al.	01/16/1996	
	10	5,513,314		Kandasamy, et al.	04/30/1996	
	11	5,542,064		Tanaka, et al.	07/30/1996	
	12	5,559,764		Chen, et al.	09/24/1996	
	13	5,586,250		Carboneau, et al.	12/17/1996	
	14	5,611,069		Matoba	03/11/1997	
	15	5,617,425		Anderson	04/01/1997	
	16	5,678,661		Mourad	10/14/1997	
	17	5,687,390		McMillan, Jr.	11/11/1997	
	18	5,696,931		Lum, et al.	12/09/1997	

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Sheet 2 of 2

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Application Number	09/832,812
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### U.S. PATENT DOCUMENTS

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		Number	Kind Code <sup>2</sup> (if known)			
	19	5,701,516		Cheng, et al.	12/23/1997	
	20	5,734,812		Yamamoto, et al.	03/31/1998	
	21	5,742,792		Yanai, et al.	04/21/1998	
	22	5,761,402		Kaneda, et al.	06/02/1998	
	23	5,778,430		Ish, et al.	07/07/1998	
	24	5,809,285		Hiland	09/15/1998	
	25	5,812,753		Chiariotti	09/22/1998	
	26	5,815,648		Giovannetti	09/29/1998	
	27	5,819,292		Hitz, et al.	10/06/1998	
	28	5,872,906		Morita, et al.	02/16/1999	
	29	5,875,456		Stallmo, et al.	02/23/1999	
	30	5,890,214		Espy, et al.	03/30/1999	
	31	5,890,218		Ogawa, et al.	03/30/1999	
	32	5,911,150		Peterson, et al.	06/08/1999	
	33	5,948,110		Hitz, et al.	09/07/1999	
	34	6,038,570		Hitz, et al.	03/14/2000	

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